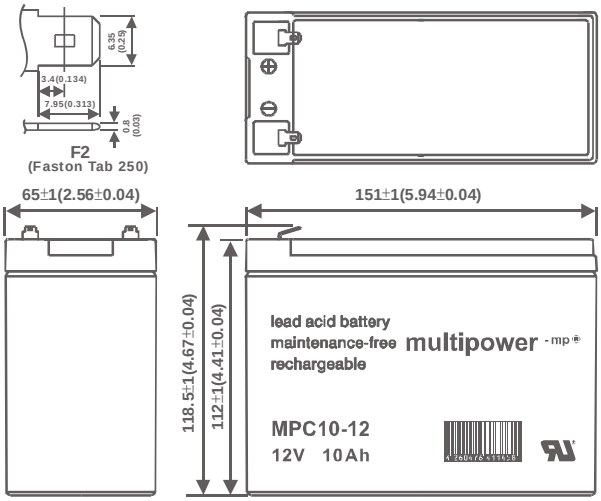
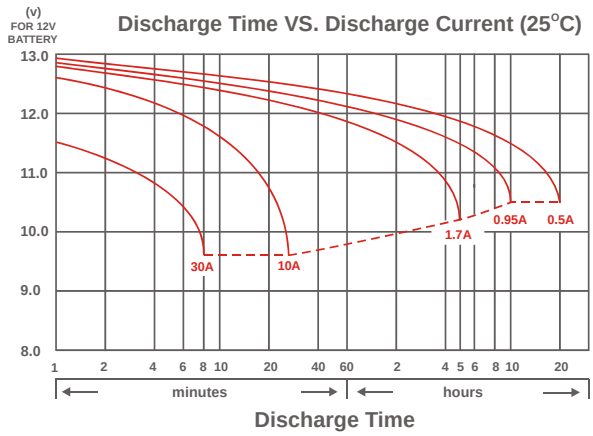
multipower -mp®

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION







MPC10-12

Nominal Voltage(V)				12V
Nominal Capacity				
20 hour rate	(0.5A	to	10.50V)	10.00Ah
10 hour rate	(0.95A	to	10.50V)	9.50Ah
5 hour rate	(1.7A	to	10.20V)	8.50Ah
1 C	(10A	to	9.60V)	5.67Ah
3 C	(30A	to	9.60V)	4.00Ah
Weight Approx.				3.3kg (7.26Lbs.)
Internal Resistance (at 1KHz) Approx.				11 mΩ
Maximum Discharge Current for 5 seconds:				150A

Charging Methods at 25℃ (77℉)

Maximum Charging Current：	3.0A
Boost Charging Voltage	14.40 to 15.00V
Boost Charge Time	8-9Hr
Float Charging Voltage	13.50 to 13.80V
Coefficient -3.0mV/℃/cell	

Operating Temperature Range

Charge	-15℃ (5℉)	to	40℃ (104℉)
Discharge	-15℃ (5℉)	to	50℃ (122℉)
Storage	-15℃ (5℉)	to	40℃ (104℉)

Charge Retention (shelf life) at 20℃ (68℉)

1 month	92%
3 month	90%
6 month	80%
Case Material	ABS UL94 HB
Terminal	F2 (Faston Tab 250)

NOV 2023

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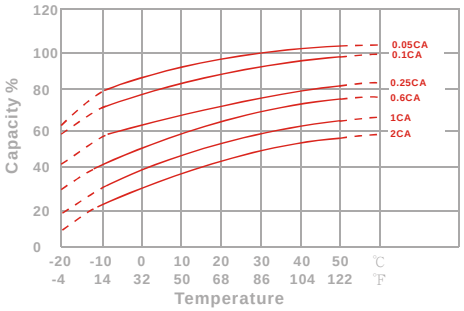
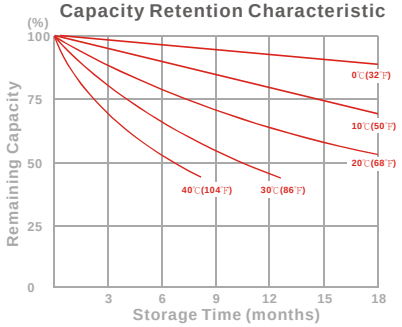
CHARACTERISTIC & PERFORMANCE DATA

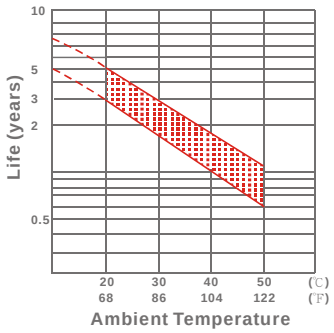
Effect of Temperature on Capacity 25℃(77℉)



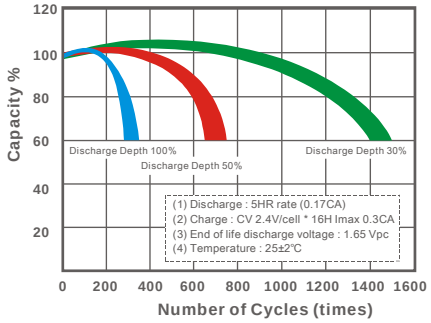
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts per Cell to Various End Voltages at 25℃(77℉)

Time \ End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	49.7	57.2	60.2	62.7	63.7	64.7	65.8
10	min	37.7	41.2	43.0	44.3	44.8	45.5	46.3
15	min	29.2	31.3	32.7	33.7	34.2	34.7	35.2
30	min	18.3	19.2	19.7	20.0	20.3	20.5	20.7
60	min	10.4	11.2	11.6	11.9	12.0	12.1	12.2
120	min	5.88	6.43	6.72	6.92	7.00	7.10	7.20
180	min	4.57	4.95	5.20	5.38	5.43	5.52	5.60
240	min	3.78	3.92	4.02	4.10	4.13	4.18	4.23
300	min	3.32	3.42	3.48	3.53	3.57	3.60	3.63
600	min	1.92	1.97	2.02	2.07	2.08	2.10	2.13
1200	min	1.06	1.09	1.11	1.15	1.15	1.16	1.17

- Discharge Rates in Amperes per Battery to Various End Voltages at 25℃(77℉)

Time \ End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	24.6	29.3	32.7	34.1	34.9	35.6	36.1
10	min	21.4	24.1	25.6	26.7	27.1	27.6	28.3
15	min	15.6	17.2	18.4	19.1	19.5	19.9	20.4
30	min	10.7	11.3	11.8	12.2	12.4	12.6	12.8
60	min	5.69	6.03	6.26	6.45	6.58	6.63	6.69
120	min	3.24	3.39	3.48	3.56	3.59	3.62	3.67
180	min	2.55	2.63	2.68	2.72	2.74	2.76	2.79
240	min	1.96	2.01	2.05	2.08	2.09	2.11	2.12
300	min	1.69	1.72	1.74	1.76	1.77	1.78	1.79
600	min	0.974	1.00	1.02	1.04	1.05	1.06	1.07
1200	min	0.525	0.527	0.532	0.536	0.538	0.541	0.544

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min≦X<10min(+12%~-12%),10min ≦X < 60min(+8% ~-8%), X≧60min(+5%~-5%)